QL
461
E535

ENTOMOLOGIA

EXPERIMENTALIS ET APPLICATA

VOLUME XVI

EDITOR-IN-CHIEF

P. A. VAN DER LAAN (Netherlands)

EDITORS

L. E. CHADWICK (U.S.A.)
K. HAGEN (U.S.A.)
T. LEWIS (United Kingdom)
T. E. MITTLER (U.S.A.)
H. J. MÜLLER (Deutschland, D.D.R.)
F. J. OPPENOORTH (Netherlands)
P. PESSON (France)
L. M. SCHOONHOVEN (Netherlands)

NORTH-HOLLAND PUBLISHING COMPANY — AMSTERDAM

1973

Copyright 1958 by Nederlandse Entomologische Vereniging

All rights reserved. No part of this book may be reproduced or translated in any form, by print, photoprint, microfilm or any other means without written permission from the publisher.

PRINTED IN THE NETHERLANDS

CONTENTS OF VOL. 16 (1973)

ABASA, R. O., Oviposition, fertility and longevity and their relation to copulation in *Antestiopsis lineaticollis* (Heteroptera: Miridae) 178

ANWAR, M., ASHRAF, M. & ARIF, M. D., Mating, oviposition and gamma sterilization of the spotted bollworm of cotton, *Earias insulana* 478

ANYA, A. O., Ecology of the Variegated Grasshopper, *Zonocerus variegatus*, (Orthoptera: Acridoidea, Pyrgomorphidae) on the Nsukka Plateau, Nigeria 64

ASCHER, K. R. S. & MEISNER, J., Evaluation of a method for assay of phagostimulants with *Spodoptera littoralis* larvae under various conditions . . 101

AUCLAIR, J. L., SRIVASTAVA, S. T. & SRIVASTAVA, P. N., Utilization of sugars by the Large Milkweed Bug, *Oncopeltus fasciatus* (Hemiptera: Lygaeidae) maintained on chemically defined diets 525

BAILEY, P., Respiration and nutrition of radiation-sterilized female *Dacus cucumis* (Dipetra: Tephritidae) 433

BARBOSA, P. & PETERS, T. M., Some effects of overcrowding on the respiration of larval *Aedes aegypti* 146

BARDNER, R. & FLETCHER, K. E., A cause of variation in the distribution of infestations of Wheat Bulb Fly (*Leptohylemyia coarctata*) within fields 31

BERLINGER, M. J., Effect of relative humidity and temperature on the survival of *Clausenia josefi* (Hymenoptera: Encyrtidae) 373

BERNAYS, E. A. & CHAPMAN, R. F., The regulation of feeding in *Locusta migratoria*: internal inhibitory mechanisms 329

BROWN, VALERIE K., Aspects of the reproductive biology of three species of *Ectobius* (Dictyoptera: Blattidae) 213

CHIPPENDALE, G. M., Diapause of the southwestern corn borer, *Diatraea grandiosella*: utilization of fat body and haemolymph reserves 395

COCHRAN, D. G., Inheritance of malathion resistance in the German Cockroach 83

COMEAU, A. & ROELOFS, W. L., Sex attraction specificity in the Tortricidae 191

CREMA, R., Structure and determination of the ambiphasic ovary of *Acyrthosiphon pisum* (Homoptera: Aphididae) 427

DADD, R. H., Autophagostimulation by mosquito larvae 295

DANTHANARAYANA, W., Host plant — pest relationships of the shot-hole borer of tea (*Xyleborus fornicatus*) (Coleoptera: Scolytidae) 305

ETIENNE, J., Conditions artificielles nécessaires à l'élevage massif de *Ceratitis rosa* (Diptera: Trypetidae) 380

GAGNEPAIN, C., Étude de la fécondité chez des couples isolés d'*Oscinella pusilla* (Dipt. Chloropidae) 223

GATEHOUSE, A. G. & LEWIS, C. T., Host location behaviour of *Stomomyx calcitrans* 275

GLEN, D. M., The food requirements of *Blepharidopterus angulatus* (Heteroptera: Miridae) as a predator of the lime aphid, *Eucallipterus tiliae* . . 255

GUTIERREZ, J. & ZON, A. Q. VAN, A comparative study of several strains of the *Tetranychus neocaledonicus* complex and sterilisation tests of males by X-rays 123
HARREWIJN, P., Functional significance of indole alkylamines linked to nutritional factors in wing development of the aphid *Myzus persicae* . . . 499
HENDRY, L. B., GREANY, P. D. & GILL, R. J., Kairomone mediated host-finding behavior in the parasitic wasp *Orgilus lepidus* 471
KAMM, J. A., Rôle of environment during diapause on the phenology of *Chrysoteuchia topiaria* (Lepidoptera: Pyralidae) 407
KING, A. B. S., The actographic examination of flight activity of the cocoa mirid *Distantiella theobroma* (Hemiptera: Miridae) 53
——, Studies of sex attraction in the cocoa capsid, *Distantiella theobroma* (Heteroptera: Miridae) 243
KUGELBERG, O., Larval development of *Lygaeus equestris* (Heteroptera, Lygaeidae) on different natural foods 165
LATHEEF, M. A. & HARCOURT, D. G., A sampling plan for studies on the population dynamics of *Leptinotarsa decemlineata* (Coleoptera: Chrysomelidae) on tomato 365
LE BRAS, S., Action d'un chimio-stérilisant, la Thiourée, sur *Musca domestica* adulte 9
LESTON, D., The flight behaviour of Cocoa-Capsids (Hemiptera: Miridae) . . 91
LOHER, W. & EDSON, K., The effect of mating on egg production and release in the cricket *Teleogryllus commodus* 483
MACAULAY, E. D. M., Tocopherol: egg productoin and migration by *Plusia gamma* 48
MA WEI CHUN & SCHOONHOVEN, L. M., Tarsal contact chemosensory hairs of the large white butterfly, *Pieris brassicae*, and their possible rôle in oviposition behaviour 343
MEHTA, R. C. & SAXENA, K. N., Growth of the Cotton Spotted Bollworm, *Earias fabia* (Lepidoptera: Noctuidae) in relation to consumption, nutritive value and utilization of food from various plants 20
MINKS, A. K. & VOERMAN, S., Sex pheromones of the summerfruit tortrix moth, *Adoxophyes orana*: Trapping performance in the field 541
MOHYUDDIN, A. I., Chemical basis of host selection in four stenophagous species that feed on *Convolvulus* and *Calystegia* at Belleville, Ontario 201
MORÈRE, J. L., Caractères physiologiques de *Plodia interpunctella* (Pyralidae) élevé sur un milieu semi-synthétique durant vingt générations 358
ODHIAMBO, T. R. & ARORA, G. K., A comparative study of oocyte development in Cotton Stainers (*Dysdercus* spp., Pyrrhocoridae) and the factors that control egg production 455
OVERMEER, W. P. J. & ZON, A. Q. VAN, Studies on hybrid sterility of single, double and triple chromosome mutation heterozygotes of *Tetranychus urticae* with respect to genetic control of spider mites 389
PETERS, D. & LEBBINK, G., The effect of oil on the transmission of pea enation mosaic virus during short inoculation probes 185

PLAUT, H. N. & MANSOUR, F., Studies of the behaviour, dispersal and damage potential of the almond wasp, *Eurytoma amygdali* 415
REDDY, A. S. & CHIPPENDALE, G. M., Water involvement in diapause and the resumption of morphogenesis of the southwestern corn borer, *Diatraea grandiosella* 445
ROBERTS, M. J., Rate of embryonic development in the tsetse fly, *Glossina morsitans orientalis* 268
SCHOONHOVEN, L. M. & DERKSEN-KOPPERS, I., Effects of secondary plant substances on drinking behaviour in some Heteroptera 141
SHARMA, R. N., Influence of dieldrin on chemosensory responses in susceptible and resistant houseflies 157
SRIVASTAVA, S. T. & AUCLAIR, J. L., Carbohydrases in the alimentary canal of the large milkweed bud, *Oncopeltus fasciatus* (Hemiptera: Lygaeidae) 301
STORCH, R. H., The effect of photoperiod on *Coccinella transversoguttata* (Coleoptera: Coccinellidae) 77
TRAYNIER, R. M. M. & WRIGHT, R. H., Modifications of responses to sex pheromone in the male Mediterranean Flour Moth, *Ephestia kuehniella*, by additional substances 1
TZANAKAKIS, M. E. & STRAVINIDES, A. S., Inhibition of development of larvae of the Olive Fruit Fly, *Dacus oleae* (Diptera: Tephritidae), in olives treated with streptomycin 39
USUA, E. J., Induction of diapause in the maize stemborer, *Busseola fusca* 322
VARJAS, L. & SEHNAL, F., Use of a juvenile hormone analogue against the Fall Webworm, *Hyphantria cunea* 115
VEIRE, M. VAN DE & DE LOOF, A., Effects of synthetic cecropia juvenile hormone and of a mimic substance, applied to different stages of the Cabbage Maggot, *Hylemyia brassicae* 491
WALKER, W. F. & SVOBODA, J. A., Suppression of Mexican Bean Beetle development by foliar applications of azasterols and reversal by cholesterol 422
WIKLUND, Christer, Host plant suitability and the mechanism of host selection in larvae of *Papilio machaon* 232
WILBERT, H. Zur Suchfähigkeit der Eilarven von *Aphidoletes aphidimyza* (Diptera: Cecidomyiidae) 514
WOODFORD, J. A. T., The climate in a large aphid-proof field cage 313

Short Communications

KUGELBERG, O., Notes on the rearing of *Spilotethus pandurus* (Heteroptera, Lygaeidae) on sunflower seeds 552
MITTLER, T. E. & TSITSIPIS, J. A., Economical rearing of larvae of the olive fruit fly, *Dacus oleae*, on a liquid diet offered on cotton towelling . . . 292
MUDD, A. & CORBET, S. A., Mandibular gland secretion of larvae of the stored products pests *Anagasta kuehniella, Ephestia cautella, Plodia interpunctella* and *Ephestia elutella* 291

SCOTT, G. C. & GREENWAY, A. R., Effects of cereal extracts on attack on wheat by Wheat Bulb Fly, *Leptohylemyia coarctata* 554
SVERDLOF, E. & WOOL, D., The effect of rearing *Tribolium castaneum* in used culture medium on the developmental time of the next generation . . . 550
VINCENT, J. F. V., A novel relationship between two types of elastic cuticle in the locust 135

Book reviews
E. ABONNENC, Les phlébotomes de la région Ethiopienne, par J. A. RIOUX 414
P. J. DEN BOER & G. R. GRADWELL, Dynamics of populations by H. KLOMP 294
T. N. ANANTHAKRISHNAN: Indian Thysanoptera by T. LEWIS 138
ANONYMUS: La lutte biologique en forêt par L. BRADER 138
A. V. DOLMATOVA & A. N. DEMINA: Les Phlébotomes (Phlébotominae) et les maladies qu'ils transmettent par J. A. RIOUX 137
R. FRITSCHE, E. KARL, W. LEHMAN & G. PROESLER: Tierische Vektoren pflanzenpathogener Viren by J. H. LOURENS 139